#### COMMONWEALTH OF KENTUCKY

### BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF MOUNTAIN WATER

DISTRICT FOR A CERTIFICATE OF PUBLIC

CONVENIENCE AND NECESSITY AUTHORIZING

THE CONSTRUCTION OF A WATER DISTRIBUTION

SYSTEM IN THE BIG CREEK AREA OF PIKE

COUNTY, KENTUCKY

THE APPLICATION OF MOUNTAIN WATER

DISTRICT FOR A CERTIFICATE OF PUBLIC

CONVENIENCE AND NECESSITY AUTHORIZING

THE CONSTRUCTION OF A WATER DISTRIBUTION

SYSTEM IN THE BLACKBERRY AREA OF PIKE

COUNTY, KENTUCKY

CASE NO. 10150

## ORDER

On March 9, 1988 and April 14, 1988, the Commission entered Orders granting the Mountain Water District ("Mountain") certificates of public convenience and necessity for two waterworks improvement projects. These Orders did not certificate the installation of conventional fire hydrants which would be contrary to state regulations and accepted engineering standards. On June 20, 1988, Mountain filed a letter requesting an "informal hearing" to present its position concerning fire hydrant installation. On August 4, 1988, an informal conference was held with Mountain to discuss this matter.

The Commission on its own Motion reopens the above styled cases to clarify its position concerning the installation of

various types of hydrants. The Commission is aware that incidental fire protection benefits may be available in some areas on rural water systems.

The Commission's Order was not intended to prohibit the installation of conventional fire hydrants where adequate and reliable volumes of water for fire protection can be obtained.

# FINDINGS AND ORDERS

The Commission after consideration of the evidence of record and being advised, is of the opinion and finds that:

- 1. In those instances where a professional engineer with a Kentucky registration can certify that adequate and reliable fire flows can be obtained in conformance with good standard engineering practice, the installation of appropriate fire hydrants should be allowed.
- 2. On 6-inch or larger water mains where a professional engineer with a Kentucky registration can certify that a minimum fire flow of 1,000 gallons per minute ("gpm") for a 2-hour period at 20 pounds per square inch gauge ("psig") residual pressure system wide can be obtained, the installation of a conventional fire hydrant should be allowed. A conventional fire hydrant is defined by the "Recommended Standards for Water Works" of the Great Lakes-Upper Mississippi River Board of Sanitary Engineers as having a bottom valve size of at least 5 inches, one 4 1/2-inch pumper nozzle, and two 2 1/2- inch nozzles. In those instances where such conditions do not exist, the installation of conventional fire hydrants is not good standard engineering practice.

- 3. In those instances where a professional engineer with a Kentucky registration can certify that a fire flow of less than 1,000 gpm, but at least 500 gpm, for a 2-hour period at 20 psig residual system wide can be obtained, the installation of a post hydrant with two 2 1/2-inch hose nozzles should be allowed.
- 4. In those instances where a professional engineer with a Kentucky registration can certify that a fire flow of less than 500 gpm, but at least 250 gpm, for a 2-hour period at 20 psig residual pressure system wide can be obtained, the installation of a post hydrant with one 2 1/2-inch hose nozzle should be allowed.
- 5. In those instances where a professional engineer with a Kentucky registration cannot certify a minimum of 250 gpm for a 2-hour period at 20 psig residual pressure system wide, an appropriate blow-off valve assembly in accordance with good standard engineering practice should be installed.

## IT IS THEREFORE ORDERED that:

- 1. Mountain be and it hereby is allowed to install appropriate fire hydrants in accordance with Findings 1 through 5.
- 2. The Commission's Orders entered March 9, 1988 and April 14, 1988 be and they hereby are affirmed in all other respects.

Done at Frankfort, Kentucky, this 16th day of August, 1988.

PUBLIC SERVICE COMMISSION

Chairman Raleuri

Commissioner Williams

ATTEST:

Executive Director